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NAS JACKSONVILLE
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LETTER AND COMMENTS FROM U S EPA REGION IV REGARDING WORK AND
SAMPLING AND ANALYSIS PLAN FOR BUILDINGS 536 AND 937 POTENTIAL SOURCE OF
CONTAMINATION 47 (PSC47)NAS JACKSONVILLE FL

2/20/2001

U S EPA REGION IV

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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 4
ATLANTA FEDERAL CENTER
61 FORSYTH STREET
ATLANTA, GEORGIA 30303-8960

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February 20, 2001

Commander Southern Division
Naval Facilities Engineering Command
ATTN: Anthony Robinson, RPM
2155 Eagle Drive
North Charleston, South Carolina 29406

Subject: EPA's comments on the submittal for PSC 47

Dear Mr. Robinson:

EPA has reviewed and enclosed comments for the Work and Sampling & Analysis Plans for the Bldg 536 and 937, PSC 47. EPA is available to discuss these comments at any time. Please integrate these into your final submittal and seek the concurrence of the State of Florida prior to submitting the final version. Please note that EPA has recently converted its filing system to electronic format and would appreciate final versions of document being submitted electronically or by CD. A cover letter summarizing the content of the submittal is also requested.

Should you have any questions regarding these comments or any other issues, please call me at 404-562-8510.

Sincerely,

A handwritten signature in black ink, appearing to read "Timothy R. Woolheater".

Timothy R. Woolheater, P.E.
Senior Remedial Project Manager
Federal Facilities Branch
Environmental Protection Agency

Enclosure (1)

CC: Jorge Casprey
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**EPA Comments on the Draft/Final
RI/FS WP/SAP for the
DRMO, PSC 47
dated November 2000**

Work Plan Comments

General

- 1) Selecting Actions Levels, Sect 4.6: The team may want to consider the use of the 95% UCL in its determination of whether a sample is considered to be an issue for further evaluation. Using the 95% will reduce the actions taken to address one or two sample point that may exceed regulatory guideline, however, do not pose a risk due to the limit areal extent.

Please note the care should be taken in establishing action levels, not to arbitrarily use the lowest screening level. It may occur that this lowest level is an ecological criteria and using these as action level goes beyond their intended purpose. There may also be times when it is entirely appropriate to select an industrial cleanup number.

- 2) Schedule and Reporting: EPA agrees with the overall approach in the work plan. However, periodic briefings should be given to ensure that duplicative efforts are not required. As different phases of the work are completed, EPA would appreciate input into the next steps.

Specific

- 3) Pg 2-3, Section 2.2.1, Second to last sentence: Please clarify where the pesticides were detected; in soils, tank, or groundwater.
- 4) Pg 2-8, Fifth bullet: Please use chemical names and the waste codes to clarify this bullet.
- 5) Pg 2-9, Top of the page: Previous experience with Silvex has shown that dioxin is associated with this material. Please add dioxin samples to your sampling plan in strategic areas where Silvex was used. In order to limit the sampling, it may be beneficial to determine the exact nature of the practices surrounding use of the material (where, how did it come into the site, etc.) at the site.
- 6) Pg 2-10, 6th bullet: Please clarify where well 47G00301 is located and reference the appropriate figure. Ensure that adequate sampling is performed in this area to determine the potential for DNAPL constituents.
- 7) Pg 2-11, Sect 2.2.5: Please clarify the action levels used for the cleanup.
- 8) Pg 2-17, Figure 2-8: Well GW-003-01-0: Please explain the significance of the 2,4-D concentration. If this would appear to be a significant issue it should be brought out in

the text in Section 2.2.4.

- 9) Pg 3-6, Sect 3.4.1: Please explain the significance and the potential use of “localized” background samples. Have samples been taken to determine what these concentration are, and why is it felt that these would differ significantly from the existing background concentrations established in OU1? Can localized be considered “anthropogenic” and is there justification for considering wide spread use issues, that wouldn’t already be considered in the original background samples? Please explain.
- 10) Pg 3-7, Section 3.4.2: Please use SW-846 Method 8310 to achieve adequate detection limits on the PAH sampling.

Please ensure that once sampling results are screened against ecological screening values that ecological risk assessors determine which will require further consideration. There may be a contaminant that exceeds a criteria but will only require a simple written justification for no further study. A meeting with the ecological reviewers may prevent unnecessary work or may even develop a streamlined approach to addressing the ecological issues.

- 11) Pg 3-7, Sect 3.4.3: Please use Region 9 PRG’s for screening, as well.
- 12) Pg 3-8, Sect 3.4.3, second bullet: Please explain or revise the reference of “USEPA SQB.”
- 13) Pg 3-9, Sect 3.5.1: Please ensure that vertical groundwater delineation is achieved and that any limitations regarding achieving this goal are clear pointed out to the team during briefings and in the RI report.
- 14) Pg 3-9, Sect 3.5.1: It may be necessary to perform sampling under paved areas unless it can be shown that limited activities at the site were performed prior to building operations. It would be prudent to attempt a more limited sampling effort, only if it can be shown that pavement was in good condition since the existence of the building construction.
- 15) Pg 3-10, Sect 3.6: Please explain why PCBs would not be sampled for and add dioxin sampling to the protocol.
- 16) Pg 3-12, Sect 3-8: It would appear that there may be the need for additional soil samples in the second round, though this is not mentioned in the first full paragraph of this page.

It will be necessary to have a limited full scan of data analyzed at off-site laboratories. This may include previous sampling; however, adequate QA/QC must be shown for these collection and sampling events. The sampling effort appear to expand into areas that are new and potentially have unknown contamination. Screening methods should be used with laboratory conformation that these areas don’t contain unsuspected contamination issues.

Sampling and Analysis Plan

General

- 17) Please integrate the changes to the WP and other related documents into this SAP in order to ensure consistency.
- 18) Sect 3.3.2: Sampling depths for the soil samples should be clearly indicated. A suggested strategy would be to collect 0-12", 12-24, and 24-36. It should be noted that the 24-36 samples should be held from analysis until the results of the 12-24 are known. If the 12-24 samples exceed delineation criteria, then 24-36 samples would be analyzed. This strategy would prevent remobilization and cutting through paved surfaces numerous times. For pesticide samples, collect of the soil should focus on the top 6 inches of the 0-12 soil column, since there is greater likelihood of he soils in the top layers to be more contaminated.
- 19) Soil and Sediment sampling: Soil and sediment sampling for ecological concerns should also include TOC and grain size sampling. Soil samples related to the earthworm testing should include TOC/Grain size analysis.

Specific

- 20) Pg 3-3, Fig 3-2: Please include sampling of the area around the Former Used Oil UST, unless this sampling has already been conducted. In this case, a figure providing the information on the closure should be provided.
- 21) Section 4.2: Please indicate or propose a threshold (i.e. 70% survival) for determining toxicity in the earthworm test prior to sampling. This should limit the discussion post-sampling. Also, the size of the site statements (pg 4-3) that limit the extent of accumulation effects are unsupported. These are better left for the modeling to be performed after the sampling. It is also suggested that earthworm sampling be complete across a gradient of contamination already established at the site. Focusing on both low and high areas of contamination may allow a determination of a potential cleanup value during the risk assessment.

QAPP

EPA has reviewed the subject document and recommends that the subject QAPP be approved provided that the following comments be addressed. In addition, the items listed as "No" or items with comments in the attached QAPP checklist should be addressed for the QAPP to be approved. The team may to develop an overall QAPP that addresses these issues and then develop updates to them for each of their sites.

General

22. It is recommended that the QAPP be written and formatted according to the specifications

AC.2 QAPP REVIEW CHECKLIST (CONTINUED)

of EPA QA/R-5, "EPA Requirements for QAPPs for Environmental Data Operations." In addition, the QAPP should reference required information that is contained in supporting documents such as the Work Plan or Sampling and Analysis Plan. For example, the documentation for the DQO process is contained in the Work Plan; the QAPP does not contain sufficient documentation of the DQO process, nor does the QAPP reference the pertinent section of the Work Plan. In may be a comment that could be addressed in a future QAPP; however, is brought to your attention in order that a discussion can be raised with regard to EPA's new focus on QAPPs.

23. Section 4.2 - The section on field sampling equipment-cleaning procedures references the Tetra Tech CompQAP. Are the cleaning procedures in this CompQAP consistent with the Region 4 cleaning procedures? If not, the Region 4 cleaning procedures in the EISOPQAM should be referenced.
24. Table 3.2a - In order to be complete, this table with analytical methods should include the extraction/cleanup methods.
25. Section 6.2 - This section on assessment and audits references a document not provided for review. The frequency of audits should be specified in the QAPP.
26. Section 6.0 - Data validation is not addressed in the QAPP. While data validation is addressed in the SAP, only minimal information is provided and the QAPP is referenced. Data validation criteria and procedures should be included in the QAPP.

Title: QAPP, Potential Source of Contamination 47, Jacksonville NAS

Location: Jacksonville, Florida

QAPP Date: October 2, 2000

QAPP REVIEW CHECKLIST

ELEMENT	COMMENTS
A1. Title and Approval Sheet	
Title	yes
Organization's name	yes
Dated signature of project manager	yes
Dated signature of quality assurance officer	yes
Other signatures, as needed	yes
A2. Table of Contents	yes
A3. Distribution List	no
A4. Project/Task Organization	in SAP
Identifies key individuals, with their responsibilities (data users, decision-makers, project QA manager, subcontractors, etc.)	
Organization chart shows lines of authority and reporting responsibilities	yes

AC.2 QAPP REVIEW CHECKLIST (CONTINUED)

ELEMENT	COMMENTS
A5. Problem Definition/Background	
Clearly states problem or decision to be resolved	yes
Provides historical and background information	yes
A6. Project/Task Description	
Lists measurements to be made	yes
Cites applicable technical, regulatory, or program-specific quality standards, criteria, or objectives	yes
Notes special personnel or equipment requirements	yes
Provides work schedule	yes
Notes required project and QA records/reports	yes
A7. Quality Objectives and Criteria for Measurement Data	
States project objectives and limits, both qualitatively and quantitatively	yes
States and characterizes measurement quality objectives as to applicable action levels or criteria	yes
A8. Special Training Requirements/Certification Listed	
States how provided, documented, and assured	no
A9. Documentation and Records	
Lists information and records to be included in data report (e.g., raw data, field logs, results of QC checks, problems encountered)	no
States requested lab turnaround time	no
Gives retention time and location for records and reports	no
B1. Sampling Process Design (Experimental Design) States the following:	
Type and number of samples required	yes
Sampling design and rationale	in SAP
Sampling locations and frequency	yes
Sample matrices	yes
Classification of each measurement parameter as either critical or needed for information only	no
Appropriate validation study information, for nonstandard situations	n/a
B2. Sampling Methods Requirements	
Identifies sample collection procedures and methods	yes
Lists equipment needs	yes
Identifies support facilities	n/a
Identifies individuals responsible for corrective action	yes
Describes process for preparation and decontamination of sampling equipment	See comment #3
Describes selection and preparation of sample containers and sample volumes	in SAP
Describes preservation methods and maximum holding times	in SAP

AC.2 QAPP REVIEW CHECKLIST (CONTINUED)

ELEMENT		COMMENTS
B3.	Sample Handling and Custody Requirements	
	Notes sample handling requirements	in SAP
	Notes chain-of-custody procedures, if required	in SAP
B4.	Analytical Methods Requirements	
	Identifies analytical methods to be followed (with all options) and required equipment	yes
	Provides validation information for nonstandard methods	n/a
	Identifies individuals responsible for corrective action	yes
	Specifies needed laboratory turnaround time	no
B5.	Quality Control Requirements	
	Identifies QC procedures and frequency for each sampling, analysis, or measurement technique, as well as associated acceptance criteria and corrective action	lab - by reference field - no acceptance criteria or corrective action
	References procedures used to calculate QC statistics including precision and bias/accuracy	no
B6.	Instrument/Equipment Testing, Inspection, and Maintenance Requirements	
	Identifies acceptance testing of sampling and measurement systems	no
	Describes equipment preventive and corrective maintenance	no
	Notes availability and location of spare parts	no
B7.	Instrument Calibration and Frequency	
	Identifies equipment needing calibration and frequency for such calibration	no
	Notes required calibration standards and/or equipment	no
	Cites calibration records and manner traceable to equipment	no
B8.	Inspection/Acceptance Requirements for Supplies and Consumables	
	States acceptance criteria for supplies and consumables	no
	Notes responsible individuals	no
B9.	Data Acquisition Requirements for Nondirect Measurements	
	Identifies type of data needed from nonmeasurement sources (e.g., computer databases and literature files), along with acceptance criteria for their use	n/a
	Describes any limitations of such data	n/a
	Documents rationale for original collection of data and its relevance to this project	n/a
B10.	Data Management	
	Describes standard record-keeping and data storage and retrieval requirements	no
	Checklists or standard forms attached to QAPP	n/a
	Describes data handling equipment and procedures used to process, compile, and analyze data (e.g., required computer hardware and	n/a

AC.2 QAPP REVIEW CHECKLIST (CONTINUED)

ELEMENT	COMMENTS
software)	
Describes process for assuring that applicable Office of Information Resource Management requirements are satisfied	n/a
C1. Assessments and Response Actions	
Lists required number, frequency and type of assessments, with approximate dates and names of responsible personnel (assessments include but are not limited to peer reviews, management systems reviews, technical systems audits, performance evaluations, and audits of data quality)	See comment #5
Identifies individuals responsible for corrective actions	yes
C2. Reports to Management Identifies frequency and distribution of reports for:	
Project status	no
Results of performance evaluations and audits	yes
Results of periodic data quality assessments	yes
Any significant QA problems	yes
Preparers and recipients of reports	no
D1. Data Review, Validation, and Verification	
States criteria for accepting, rejecting, or qualifying data	in SAP, by reference
Includes project-specific calculations or algorithms	n/a
D2. Validation and Verification Methods	
Describes process for data validation and verification	no
Identifies issue resolution procedure and responsible individuals	no
Identifies method for conveying these results to data users	no
D3. Reconciliation with User Requirements	
Describes process for reconciling project results with DQOs and reporting limitations on use of data	no

References

EPA/600/R-98/018, Guidance for Quality Assurance Project Plans, EPA QA/G-5, February 1998
(Available from EPA's Website: http://www.epa.gov/ncercqa/qa/qa_docs.html#R-5)